

**What is Claimed is:**

1. A method of communicating a data signal on an electric power system,  
comprising:  
communicating the data signal on the electric power system;  
modifying the characteristics of the electric power system to reduce the  
data signal transmitted to an electrical component located on the electric power  
system; and  
transmitting the data signal to a customer premise.
2. The method of claim 1, wherein modifying comprises increasing an impedance  
imposed by the electrical component on the data signal.
3. The method of claim 2, further comprising increasing inductive properties of the  
electrical component.
4. The method of claim 3, wherein the inductive properties are increased by an  
inductor.
5. The method of claim 3, further comprising adding one or more ferrite cores to the  
electric power system.

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6. The method of claim 5, further comprising locating the ferrite cores around a connection point on the electrical component.
7. The method of claim 6, wherein the connection point is on a primary side of a transformer.
8. The method of claim 6, wherein the connection point is on a secondary side of a transformer.
9. The method of claim 5, further comprising locating the ferrite cores around at least one conductor attached to the electrical component.
10. The method of claim 1, further comprising increasing an impedance from the electrical component to a point at which the data signal is provided to the network.
11. The method of claim 1, further comprising reducing electromagnetic noise created by the electrical component.
12. The method of claim 1, wherein the characteristics of the electric power system are modified without substantially reducing a voltage signal.

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13. The method of claim 12, wherein the voltage signal has a frequency substantially in the range of 0 to 100 Hertz.
14. The method of claim 1, wherein the data signal has a higher frequency than a voltage signal.
15. The method of claim 1, wherein the electrical component includes at least one of the following: a transformer, a capacitor bank, a switch tap, a service entrance, a voltage sensing device, and an electrical measurement device.
16. The method of claim 1, wherein the transformer is a distribution transformer.
17. The method of claim 1, wherein the data signal has a frequency substantially in the range of 1 to 100 Mega Hertz.
18. A system for communicating a data signal on an electric power system, comprising:
- an electric power system;
  - a transformer in communication with the electric power system;
  - a data source in communication with the electric power system, wherein the data source communicates a data signal to the electric power system; and
  - a blocking device in communication with the electric power system,

wherein the blocking device prevents a portion of the data signal from being transmitted to the transformer.

19. The system of claim 18, further comprising a data termination device for communicating with the data signal, wherein the blocking device substantially permits the data signal to be communicated with the data termination device.
20. The system of claim 19, wherein the data termination device transmits and receives the data signal.
21. The system of claim 18, wherein the data termination device is a computing device located in a customer premise.
22. The system of claim 18, wherein the data termination device includes at least one of the following: a facsimile machine, a telephone, a television, appliance, and a computer.
23. The system of claim 18, wherein the data source transmits and receives the data signal.
24. The system of claim 18, wherein the blocking device transmits and receives the data signal.

25. The system of claim 18, further comprising a data network in communication with the data source.
26. The system of claim 25, wherein the data network is the Internet.
27. The system of claim 18, wherein the data source includes at least one of the following: a power line bridge, a router, a medium voltage coupler, and a computing device.
28. The system of claim 18, wherein at least one data communication line carries the data signal data between the data source and the blocking device.
29. The system of claim 18, wherein at least one service line carries the data signal and the voltage signal between the customer premise and the transformer.
30. The system of claim 18, wherein the blocking device is an inductor.
31. A device for communicating a data signal on an electric power system, comprising:
- an input port for receiving the voltage signal;
  - an output port for receiving the data signal; and

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a blocking device in communication with the input port and the output port, wherein the blocking device increases the impedance presented to the data signal without substantially influencing the voltage signal.

32. The device of claim 31, wherein the blocking device is an inductive element.

33. The device of claim 31, wherein the blocking device creates an impedance for the data signal.

34. A system for communicating a data signal on an electric power system, comprising:

an electric power system;

an electrical component in communication with the electric power system;

a data source in communication with the electric power system, wherein

the data source communicates a data signal to the electric power system; and

a blocking device in communication with the electric power system,

wherein the blocking device prevents a portion of the data signal from being transmitted to the transformer.

35. The system of claim 34, wherein the electrical component includes at least one of the following: a transformer, a capacitor bank, a switch tap, a service entrance, a voltage sensing device, and an electrical measurement device.

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36. A system for communicating a high frequency data signal on an electric power system, comprising:

an electric power system;

an electrical transformer in communication with the electric power system,

wherein the electrical transformer transforms a low frequency voltage signal;

a power line bridge in communication with the electric power system,

wherein the power line bridge communicates the high frequency data signal on the electric power system; and

a blocking device in communication with the electric power system,

wherein the blocking device prevents a portion of the data signal from being transmitted to the electrical transformer without substantially reducing the low frequency voltage signal.

37. The system of claim 36, wherein the power line bridge is in parallel with the electrical transformer.

38. The system of claim 36, wherein the electrical transformer is in communication with a distribution line and a service line, and wherein the power line bridge is in communication with the distribution line and the service line.

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39. The system of claim 36, wherein the blocking device is connected to an attachment lug on the electrical transformer.
40. The system of claim 39, wherein the attachment lug is connected to a secondary winding on the electrical transformer.
41. The system of claim 39, wherein the attachment lug is connected to a secondary winding on the electrical transformer.
42. The system of claim 36, wherein the blocking device is located within the electrical transformer.

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